SERVICE MANUAL

FISHER

SERVO DRIVE
SEMI-AUTOMATIC
TURNTABLE

MT-M87

(EUROPE)

134 104 40

SPECIFICATIONS

Motor	DC Servo
Drive System	Belt
Wow and Flutter (WRMS)	0.15%
Rumble (DIN 45539B)	−60dB
Speed Variation	±0.5%
Platter Diameter	296 mm
Platter Weight	0.5 kg
Speed Selector	33-1/3rpm / 45rpm
Automatic Functions	
Stop	Yes
Reject	Yes
Automatic Tonearm Return at End of Record	Yes
Manual Functions	
Start	Yes
Stop	Yes
Tonearm Data	
Resonance	<18Hz
Effective Length	195 mm
Shape	Straight
Max. Tracking Error	±1.8°
Cueing	Viscous Damped
GENERAL	
Power Requirements	AC 16V
Dimensions (WxHxD)	355 x 100 x 350 mm
Weight (approx)	2.3 kg

REFERENCE No. WM-570016

REPLACING THE CARTRIDGE

After removing the stylus assembly, insert a small screwdriver between the cartridge shell and the cartridge assembly. Move the screwdriver in the direction of the arrow until the cartridge assembly is released (Figure 1). Pull out the cartridge assembly, away from the cartridge shell as shown in Figure 2. Unplug the three wires from the cartridge. Plug the three wires into the replacement cartridge. Be sure to plug the wires (color coded) into the terminals as shown in Figure 3. Place the lip of the cartridge (located at the rear of the cartridge) in the slot in the cartridge shell and push the cartridge up untill it clicks into place (Figure 4).

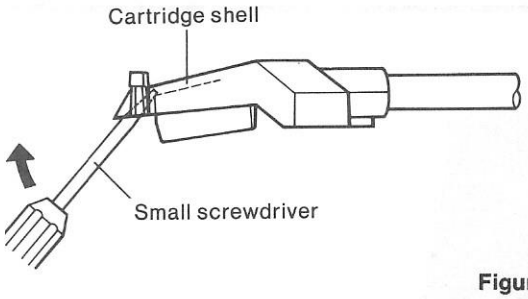


Figure 1

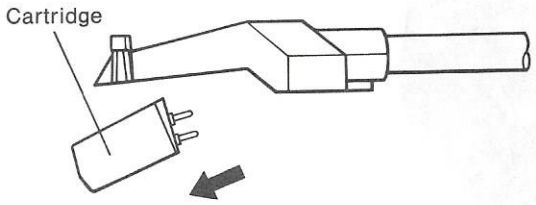
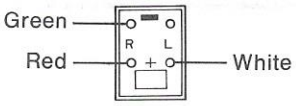


Figure 2



Location of color coded wires on rear of cartridge

Figure 3

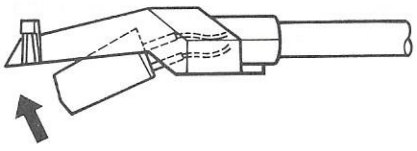


Figure 4

ADJUSTMENT

ROTATION ADJUSTMENT

1. Set the speed switch (S2) to the "45rpm" position and set the unit in the playback mode.
2. Adjust the VR1 using the strobo scope sheet so that the rotation should be fitted well.
3. Set the speed switch (S2) to the "33-1/3rpm" position and adjust the VR2 in the same method as explained on 45rpm.

PICK-UP RETURN POSITION ADJUSTMENT

1. Remove the turntable mat and the turntable platter.
2. Adjust the screw as illustrated in Figure 5, so that the tonearm return position is positioned. Turning the screw clockwise adjusts the return position outward and counter-clockwise adjust it inward.

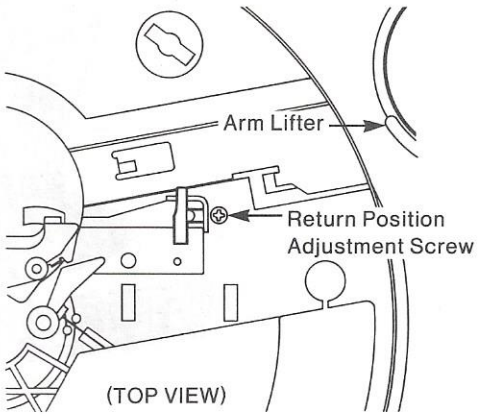


Figure 5

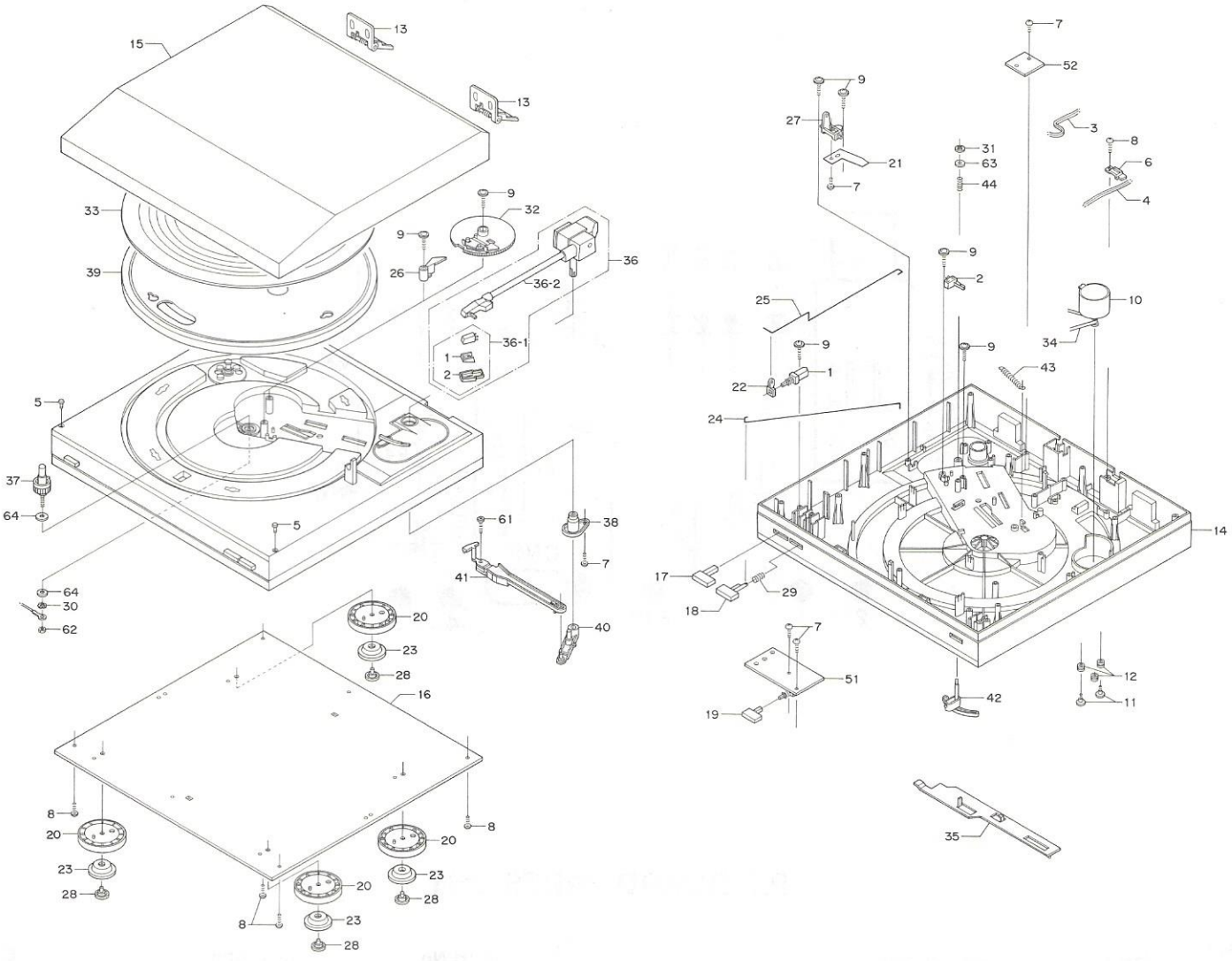
CABINET & CHASSIS PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKAGE			
	620 190 0170	Box Corrugate-Exp.	1
	620 148 6988	Bag Polyethylene-Exp.	1
	620 148 7992	Poly Cover	1
	620 148 8067	Bag Polyethylene-Ind.	1
	620 149 3269	Pad Front	1
	620 149 3276	Pad Rear	1
	620 149 3283	Pad	1
	620 149 3429	Patching Sheet	1
	620 149 3498	Patching Sheet	1
	620 152 8961	Serial No. Sheet	2
ACCESSORIES			
	620 057 8783	Bag Fan	1
	620 063 6094	Adapter EP	1
	620 152 2624	Certificate Card	1
	620 152 8961	Serial No. Sheet	1
	620 190 0286	Explanatory Booklet	1
CABINET			
	620 190 5540	Connector 1P Assy	1
	620 050 3259	Cramp Wire	1
	620 192 1199	Jumper	1
	620 103 0846	Label	1
	620 190 0095	Name Plate	1
	620 152 8961	Serial No. Sheet	1
1	620 016 5020	Switch Push	1
2	620 016 8106	Leaf Switch [S1]	1
3	620 189 7937	Plug Cord RCA	1
4	620 022 1160	Plug Cord Power	1
5	620 047 6614	Pad Lid	2
6	620 050 3693	Cramp Wire	1
7	620 051 2480	Screw, Button Hd. Tapping +M3.0X10	5
8	620 051 2497	Screw, Button Hd. Tapping +M3.0X12	5
9	620 051 4316	Screw	7
10	620 062 7931	Motor Assy	1
11	620 064 5690	Screw	2
12	620 064 8684	Rubber Cushion	3
13	620 080 9795	Hinge Assy	2
14	620 189 6985	Cabinet	1
15	620 094 8517	Lid	1
16	620 190 0064	Plate Bottom	1
17	620 189 7166	Knob (CUEING)	1
18	620 189 7173	Knob (STOP)	1
19	620 189 7180	Knob (SPEED)	1
20	620 112 9182	Leg	4
21	620 190 0125	Plate	1
22	620 119 7457	Spacer	1
23	620 124 3475	Cushion	4
24	620 190 0132	Rod	1
25	620 190 0149	Rod	1
26	620 132 4778	Arm	1
27	620 132 5546	Arm	1
28	620 135 3518	Pin	4
29	620 139 3743	Spring	1
30	620 051 5894	Washer	1
31	620 052 1475	Ring Snap	1
32	620 063 0030	Gear Cycling Assy	1
33	620 065 0274	Mat Turntable	1
34	620 065 1134	Belt	1
35	620 082 1575	Plate Drive Assy	1
36	620 190 0026	Pick-up Assy	1
36-1	620 003 5927	Cartridge (MG-09)	1
1	620 003 5934	Stylus (ST-09D)	1
2	620 129 6259	Retainer Needle	1
36-2	620 190 0033	Tone Arm Assy	1
37	620 085 4184	Shaft Turntable Complete	1
38	620 189 7227	Spacer	1
39	620 126 4029	Turntable	1
40	620 132 5577	Plate Pick-up	1
41	620 132 5584	Arm Return	1
42	620 190 0156	Arm Lifter	1
43	620 192 5098	Spring	1
44	620 139 3736	Spring	1
51	620 190 0002	Power Supply P.C.B. Assy	1
52	620 007 8122	Phono P.C.B.	1
61	411 021 4005	SCR S-TPG BIN 3X12	1
62	411 004 6408	NUT HEX 4	1
63	411 008 8705	WASHER Z 3.2X10X0.5	1
64	411 008 9603	WASHER Z 4.2X10X0.5	2

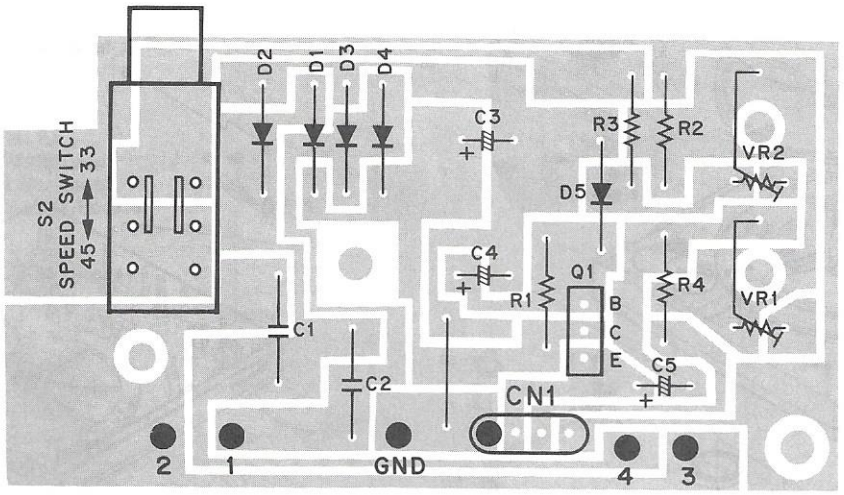
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

CABINET & CHASSIS EXPLODED VIEW



POWER SUPPLY P.C.BOARD
(BOTTOM VIEW)



P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty
POWER SUPPLY P.C.B. ASSY			
51	620 190 0002	Power Supply P.C.B. Assy	1
S2	620 016 8083	Push Switch 1 Key	1
	620 031 4763	Wire Wrap Terminal	2
CN1	620 024 3544	Jumper	1
VR1	620 004 7265	Potentiometer 10K-B	1
VR2	620 004 8002	Semi Fixed 30K-B	1
Q1	405 023 3104	TR 2SD330-F	1
D1	407 096 5702	DIODE MPG06B	1
D2	407 096 5702	DIODE MPG06B	1
D3	407 096 5702	DIODE MPG06B	1
D4	407 096 5702	DIODE MPG06B	1
D5	407 049 6404	ZENER DIODE GZA12Z	1
C1	404 012 7000	CERAMIC 0.01U P 500V	1
C2	404 012 7000	CERAMIC 0.01U P 500V	1
C3	403 045 2907	ELECT 1000U M 25V	1
C4	403 044 0201	ELECT 47U M 16V	1
C5	403 043 4903	ELECT 33U M 16V	1
R1	401 023 1409	CARBON 820 JA 1/4W	1
R2	401 014 0008	CARBON 13K JA 1/4W	1
R3	401 016 0105	CARBON 20K JA 1/4W	1
R4	401 012 5708	CARBON 1K JA 1/4W	1

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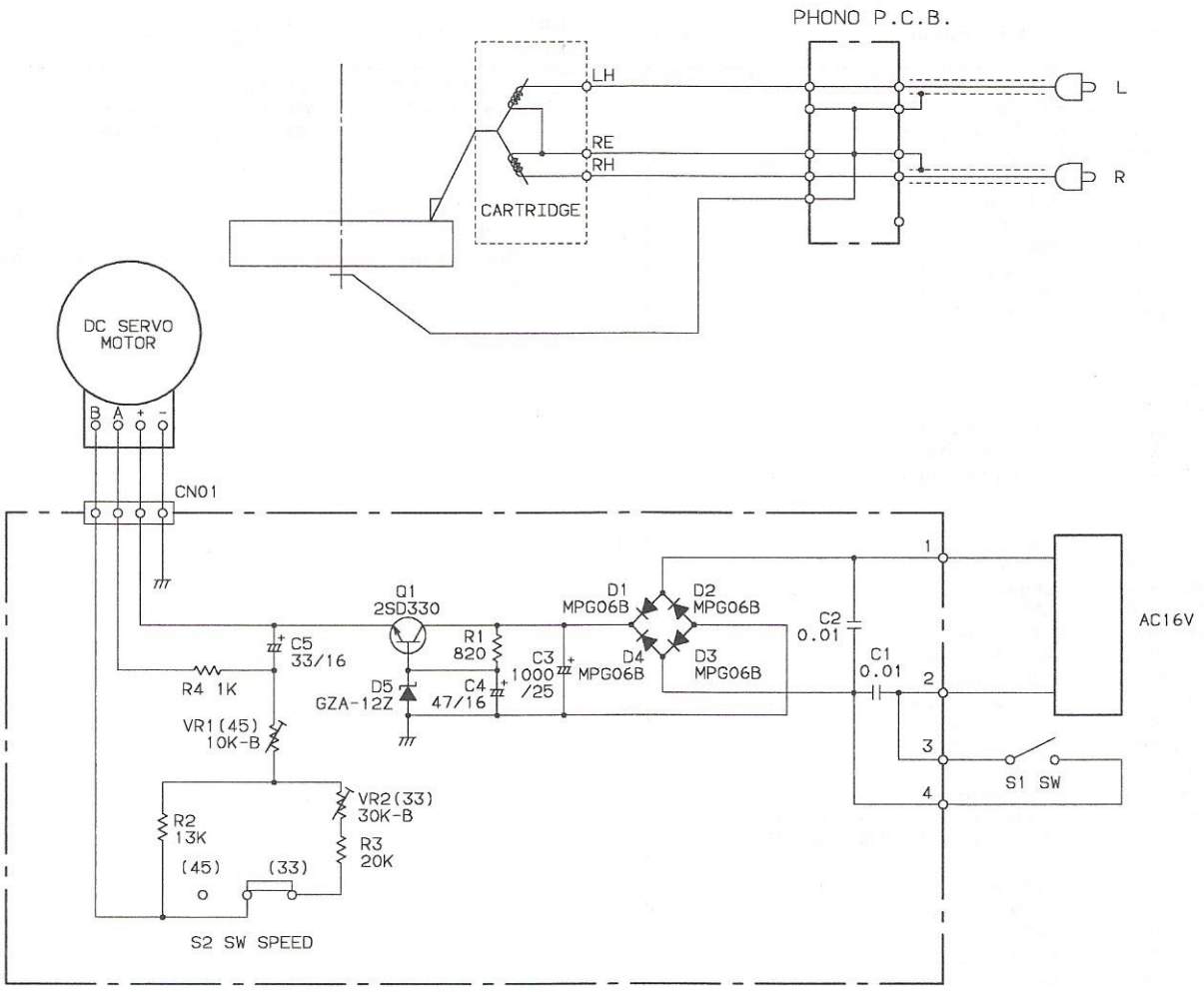
SCHEMATIC DIAGRAM



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